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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,979	07/30/2003	Alfred Hardy Sullivan JR.	C&A024U	9505
32047	7590	07/26/2006		
GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERICAL STREET MANCHESTER, NH 03101				
			EXAMINER STAICOVICI, STEFAN	
			ART UNIT 1732	PAPER NUMBER

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/629,979	<b>Applicant(s)</b> SULLIVAN ET AL.	
	<b>Examiner</b> Stefan Staicovici	<b>Art Unit</b> 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18, 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicants' amendment filed May 24, 2006 has been entered. Claims 18 and 21-25 are pending in the instant application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hus *et al.* (US Patent No. 6,926,856 B2) in view of JP 02-143842.

Hus *et al.* ('856) teach the basic claimed process for forming a trim panel including, providing a fabric material see col. 6, line 61 through col. 7, line 15), forming a polyurethane foam layer as a backing layer onto said fabric layer (see col. 7, lines 16-35) and injection molding a plastic substrate against said polyurethane foam layer to form said trim panel (see col. 5, lines 41-56). Further, Hus *et al.* ('856) teach that the foam backing layer prevents strike through of the injection molded plastic layer (see col. 7, lines 5-10), hence it is submitted that Hus *et al.* ('856) teach injection molding a plastic substrate onto said foam backing layer without the need of an additional barrier layer.

Regarding claim 18, although Hus *et al.* ('856) teach a fabric having a polyurethane

foam layer backing, Hus *et al.* ('856) do not teach that said polyurethane backing is a polyurethane dispersion that is applied without the use of adhesives or flame lamination. JP 02-143842 teaches using a polyurethane dispersion to form a cushioning/vibration damping panel without using adhesives. Therefore, it would have been obvious for one of ordinary skill in the art to have provided the polyurethane dispersion without using adhesives as taught by JP 02-143842 to form the polyurethane foam backing layer in the process of Hus *et al.* ('856) because, JP 02-143842 specifically teaches that said polyurethane dispersion process provides for a less costly process by eliminating the need for adhesives, hence also providing for a more environmentally efficient process.

In regard to claims 21-22, Hus *et al.* ('856) teach a woven or a knitted fabric (see col. 6, lines 66-67).

4. Claim 18 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hus *et al.* (US Patent No. 6,926,856 B2) in view of Gribble *et al.* (US 2004/0109992).

Hus *et al.* ('856) teach the basic claimed process for forming a trim panel including, providing a fabric material see col. 6, line 61 through col. 7, line 15), forming a polyurethane foam layer as a backing layer onto said fabric layer (see col. 7, lines 16-35) and injection molding a plastic substrate against said polyurethane foam layer to form said trim panel (see col. 5, lines 41-56). Further, Hus *et al.* ('856) teach that the foam backing layer prevents strike through of the injection molded plastic layer (see col. 7, lines 5-10), hence it is submitted that Hus *et al.* ('856) teach injection molding a plastic substrate onto said foam backing layer without the need of an additional barrier layer.

Regarding claims 18 and 23-24, although Hus *et al.* ('856) teach a fabric having a polyurethane foam layer backing, Hus *et al.* ('856) do not teach that said polyurethane backing is a polyurethane dispersion that is applied without the use of adhesives or flame lamination, wherein said foam layer has a thickness of about 2.6-51.3 mm and a density of about 0.016 to 0.32 g/cm<sup>3</sup>. Gribble *et al.* (US 2004/0109992) teach a process for forming products for vehicle interiors, such as a seat cushion or a headrest, including providing a fabric substrate (cloth), applying a polyurethane dispersion that adheres to said fabric without the need of adhesives or flame lamination and heating said polyurethane dispersion to form a foam backing layer having a density of 0.035-0.16 kg/m<sup>3</sup> and a thickness of 3.6 mm (see Abstract and, paragraphs [0002], [0012] and [0071]). Therefore, it would have been obvious for one of ordinary skill in the art to have provided the polyurethane dispersion without using adhesives or flame lamination as taught by Gribble *et al.* (US 2004/0109992) to form the polyurethane foam layer in the process of Hus *et al.* ('856) because, Gribble *et al.* (US 2004/0109992) teaches that said polyurethane dispersion provides for an improved process for making foam composites by eliminating the need of flame lamination or adhesives, hence providing for a less costly and a more environmentally efficient process. It is noted that, because Hus *et al.* ('856) teach that the foam backing layer prevents strike through of the injection molded plastic layer (see col. 7, lines 5-10), then it is submitted that the purpose of the polyurethane dispersion foam layer in the process of Hus *et al.* ('856) in view of Gribble *et al.* (US 2004/0109992) is also to avoid any strike-through of the injected plastic material. As such, it is further submitted that said polyurethane dispersion foam layer does not allow strike-through of the injected plastic substrate in order for the invention of Hus *et*

*al.* ('856) in view of Gribble *et al.* (US 2004/0109992) to function as described.

In regard to claims 21-22, Hus *et al.* ('856) teach a woven or a knitted fabric (see col. 6, lines 66-67).

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hus *et al.* (US Patent No. 6,926,856 B2) in view of JP 02-143842 and in further view of EP 0 361 856 A2.

Hus *et al.* ('856) in view of JP 02-143842 teaches the basic claimed process as described above.

Regarding claim 25, although Hus *et al.* ('856) in view of JP 02-143842 teach a fabric, Hus *et al.* ('856) in view of JP 02-143842 do not teach a fabric having a specific weight of 100-950 g/m<sup>2</sup>. It is noted that Hus *et al.* ('856) in view of JP 02-143842 teach a process for making trim covers (see col. 1, lines 5-52 of Hus *et al.* ('856). EP 0 361 856 A2 teaches that the fabric for making a seat cover (trim cover) has a weight of at least 380 g/m<sup>2</sup> (see Abstract). Therefore, it would have been obvious for one of ordinary skill in the art to have provided a fabric having a weight of 380 g/m<sup>2</sup> as taught by EP 0 361 856 A2 to make the trim cover by the process of Hus *et al.* ('856) in view of JP 02-143842 because, EP 0 361 856 A2 teaches that such a fabric provides for superior abrasion and snag resistance, hence providing for an improved product and also because all references teach similar end-products, hence suggesting similar materials and desired properties.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hus *et al.* (US Patent No. 6,926,856 B2) in view of Gribble *et al.* (US 2004/0109992) and in further view of EP 0 361 856 A2.

Hus *et al.* ('856) in view of Gribble *et al.* (US 2004/0109992) teaches the basic claimed process as described above.

Regarding claim 25, although Hus *et al.* ('856) in view of Gribble *et al.* (US 2004/0109992) teach a fabric, Hus *et al.* ('856) in view of Gribble *et al.* (US 2004/0109992) do not teach a fabric having a specific weight of 100-950 g/m<sup>2</sup>. It is noted that Hus *et al.* ('856) in view of Gribble *et al.* (US 2004/0109992) teach a process for making trim covers (see col. 1, lines 5-52 of Hus *et al.* ('856). EP 0 361 856 A2 teaches that the fabric for making a seat cover (trim cover) has a weight of at least 380 g/m<sup>2</sup> (see Abstract). Therefore, it would have been obvious for one of ordinary skill in the art to have provided a fabric having a weight of 380 g/m<sup>2</sup> as taught by EP 0 361 856 A2 to make the trim cover by the process of Hus *et al.* ('856) in view of Gribble *et al.* (US 2004/0109992) because, EP 0 361 856 A2 teaches that such a fabric provides for superior abrasion and snag resistance, hence providing for an improved product and also because all references teach similar end-products, hence suggesting similar materials and desired properties

7. Claims 18 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* (US Patent No. 6,926,856 B2).

Gribble *et al.* (US 2004/0109992) teach the basic claimed process for forming products for vehicle interiors, such as a seat cushion or a headrest, including providing a fabric substrate (cloth), applying a polyurethane dispersion that adheres to said fabric without the need of adhesives of flame lamination and heating said polyurethane dispersion to form a foam backing layer having a density of 0.035-0.16 kg/m<sup>3</sup> and a thickness of 3.6 mm (see Abstract and,

paragraphs [0002], [0012] and [0071]). Further, Gribble *et al.* (US 2004/0109992) teach hot lamination molding of a polyethylene film (plastic substrate) directly to said foam-backing layer without the need of a non-permeable layer (see paragraphs [0007] and [0011]).

Regarding claim 18, although Gribble *et al.* (US 2004/0109992) teach laminating a polymeric film to said foam backed fabric, Gribble *et al.* (US 2004/0109992) does not teach injection molding a plastic layer to said foam backed fabric. Hus *et al.* ('856) teach a process for forming a trim panel including, providing a fabric material see col. 6, line 61 through col. 7, line 15), forming a polyurethane foam layer as a backing layer onto said fabric layer (see col. 7, lines 16-35) and injection molding a plastic substrate against said polyurethane foam layer to form said trim panel (see col. 5, lines 41-56). Further, Hus *et al.* ('856) teach that the foam backing layer prevents strike through of the injection molded plastic layer (see col. 7, lines 5-10), hence it is submitted that Hus *et al.* ('856) teach injection molding a plastic substrate onto said foam backing layer without the need of an additional barrier layer. Therefore, it would have been obvious for one of ordinary skill in the art to injection mold a plastic substrate as taught by Hus *et al.* ('856) over the foam covered fabric layer in the process of Gribble *et al.* (US 2004/0109992) because, Hus *et al.* ('856) teach a more efficient process that results in molding improved products that have good appearance, precise dimensions and stable cross sections (see col. 1, lines 5-55). It is noted that, because Hus *et al.* ('856) teach that the foam backing layer prevents strike through of the injection molded plastic layer (see col. 7, lines 5-10), then it is submitted that the purpose of the polyurethane dispersion foam layer in the process of Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) is also to avoid any strike-through of the



injected plastic material. As such, it is further submitted that said polyurethane dispersion foam layer does not allow strike-through of the injected plastic substrate in order for the invention of Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) to function as described.

In regard to claims 21 and 22, Hus *et al.* ('856) teach a woven or a knitted fabric (see col. 6, lines 66-67). Gribble *et al.* (US 2004/0109992) teaches using a fabric in making products for vehicle interiors, such as a seat cushion or a headrest (see paragraph [0002]), whereas Hus *et al.* ('856) a trim panel component. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a woven or a knitted fabric as taught by Hus *et al.* ('856) in the process of Gribble *et al.* (US 2004/0109992) because of known advantages that a woven or knitted fabric provides such as a more comfortable feel, hence providing for an improved product and also because, Gribble *et al.* (US 2004/0109992) teaches using a fabric, hence suggesting the woven or a knitted fabric of Hus *et al.* ('856). Also, it is noted that both references teach similar end-products, hence suggesting the use of similar materials.

Specifically regarding claims 23 and 24, Gribble *et al.* (US 2004/0109992) teach that said polyurethane dispersion foam backing layer has a density of 0.035-0.16 kg/m<sup>3</sup> and a thickness of 3.6 mm (see Abstract and, paragraphs [0002], [0012] and [0071]).

8. Claims 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* (US Patent No. 6,926,856 B2) and in further view of EP 0 361 856 A2.

Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) teaches the basic claimed process as described above.

Regarding claim 25, although Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) teach a woven or knitted fabric, Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) do not teach a fabric having a specific weight of 100-950 g/m<sup>2</sup>. It is noted that Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) teach a process for making products for vehicle interiors, such as a seat cushion. EP 0 361 856 A2 teaches that the fabric for making a seat cover has a weight of at least 380 g/m<sup>2</sup> (see Abstract). Therefore, it would have been obvious for one of ordinary skill in the art to have provided a fabric having a weight of 380 g/m<sup>2</sup> as taught by EP 0 361 856 A2 to make the seat cushion by the process of Gribble *et al.* (US 2004/0109992) in view of Hus *et al.* ('856) because, EP 0 361 856 A2 teaches that such a fabric provides for superior abrasion and snag resistance, hence providing for an improved product and also because all references teach similar end-products, hence suggesting similar materials and desired properties.

### ***Response to Arguments***

9. Applicants' arguments filed May 24, 2006 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD



Primary Examiner

7/21/06

AU 1732

July 21, 2006